

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A computer readable medium containing a file for storing a root storage including a model directory storage comprising at least one model storage, wherein said at least one model storage comprises a model header.
2. (Currently Amended) The computer readable medium of claim 1, wherein said at least one model storage further comprises at least one element list storage including at least one element chunk stream, wherein said at least one element chunk stream comprises an element chunk header and at least one element associated with said element chunk header.
3. (Currently Amended) A computer readable medium containing a file for storing a root storage including a model directory storage comprising a plurality of model storagess, wherein each of said plurality of model storages is for grouping related elements, is identifiable by a unique identifier, and comprises a model header stream, a graphic element list storage containing at least one element chunk stream, and a control element list storage containing at least one element chunk stream, wherein each said element chunk stream comprises an element chunk header and at least one variable sized element associated with its respective element chunk header.
4. (Original) The computer readable medium of claim 3, wherein said root storage further comprises a control model storage containing a control model header, a global control element list storage and a global graphic element list storage, wherein said global control element list storage and said global graphic element list storage contain element chunk streams including global elements.

5. (Original) The computer readable medium of claim 4, wherein said global elements contain information relevant for all models in said model directory storage.

6. (Original) The computer readable medium of claim 3, wherein said root storage further comprises at least one of a first stream containing a header, a second stream containing session information, a third stream containing a manifest and a fourth stream containing file properties.

7. (Original) The computer readable medium of claim 3, wherein said root storage further comprises at least one of a stream or a storage, which are not contained in said model directory.

8. (Original) The computer readable medium of claim 3, wherein at least one element chunk in said graphic element list is compressed.

9. (Original) The computer readable medium of claim 3, wherein at least one element chunk in said control element list is compressed.

10. (Original) The computer readable medium of claim 3, wherein at least one element chunk in said graphic element list is encrypted.

11. (Original) The computer readable medium of claim 3, wherein at least one element chunk in said control element list is encrypted.

12. (Original) The computer readable medium of claim 3, wherein at least one element chunk in said control element list is encrypted and compressed.

13. (Original) The computer readable medium of claim 3, wherein at least one element chunk in said graphic element list is encrypted and compressed.

14. (Original) The computer readable medium of claim 3, wherein said root storage is adapted to be operable with a computer aided design program.

15. (Currently Amended) A computer program product comprising a computer readable medium having a computer program logic stored therein, the computer program logic comprising:

means for enabling a computing unit to store a root storage comprising a model directory in a storage area; and

means for enabling said computing unit to store at least one model in said model directory, wherein said at least one model storage comprises a control element list storage having element chunk streams containing control elements, and a graphic element list storage having element chunk streams containing graphic elements.

16. (Original) The computer program product of claim 15, wherein said storage area is a memory unit in a network.

17. (Original) The computer program product of claim 15, wherein said storage area is a memory unit in a workstation.

18. (Original) The computer program product of claim 15, further comprising means for enabling the computing unit to store a control model storage in said root storage, wherein said control model storage includes a global graphic element list storage and a global control element list storage, wherein said global graphic element list storage contains at least one global element chunk stream having at least one global graphic element and said global control element list storage contains at least one global element chunk stream having at least one global control element.

19. (Original) The computer program product of claim 15, wherein at least one element chunk in said graphic element list is compressed.

20. (Original) The computer program product of claim 15, wherein at least one element chunk in said control element list is compressed.

21. (Original) The computer program product of claim 15, wherein at least one element chunk in said graphic element list is encrypted.

22. (Original) The computer program product of claim 15, wherein at least one element chunk in said control element list is encrypted.

23. (Original) The computer program product of claim 15, wherein at least one element chunk in said graphic element list is encrypted and compressed.

24. (Original) The computer program product of claim 15, wherein at least one element chunk in said control element list is encrypted and compressed.

25. (Original) The computer program product of claim 15, wherein said root storage is adapted to be operable with a computer aided design program.

26. (Original) The computer program product of claim 15, wherein said root storage further comprises at least one of a first stream containing a header, a second stream containing session information, a third stream containing a manifest and a fourth stream containing file properties.

27. (Original) The computer program product of claim 15, wherein said root storage further comprises at least one of a stream and a storage, neither of which are contained in said model directory.

28. (Currently Amended) A computer program product comprising a computer readable medium having a computer program logic stored therein, the computer program logic comprising:

means for enabling a computing unit to store a root storage comprising a model directory in the computer readable medium; and

means for enabling said computing unit to store in the computer readable medium at least one model in said model directory, wherein said at least one model is for grouping related elements, is identifiable by a unique identifier, and comprises a control element list having variable sized element chunks containing control elements, and a graphic element list having variable sized element chunks containing graphic elements.

29. (Original) The computer program product of claim 28, further comprising means for enabling said computing unit to store a control model in said root storage, wherein said control model includes a global graphic element list and a global control element list, wherein said global graphic element list contains at least one global element chunk having at least one global graphic element and said global control element list contains at least one global element chunk having at least one global control element.

30. (Original) The computer program product of claim 28, wherein said root storage further comprises at least one of a first stream containing a header, a second stream containing session information, a third stream containing a manifest and a fourth stream containing file properties.

31. (Original) The computer program product of claim 28, wherein at least one element chunk in said graphic element list is compressed.

32. (Original) The computer program product of claim 28, wherein at least one element chunk in said control element list is compressed.

33. (Original) The computer program product of claim 28, wherein at least one element chunk in said graphic element list is encrypted.

34. (Original) The computer program product of claim 28, wherein at least one element chunk in said control element list is encrypted.

35. (Original) The computer program product of claim 28, wherein at least one element chunk in said graphic element list is encrypted and compressed.

36. (Original) The computer program product of claim 28, wherein at least one element chunk in said control element list is encrypted and compressed.

37. (Original) The computer program product of claim 28, wherein said root storage is adapted to be operable with a computer aided design program.

38. (Original) The computer program product of claim 28, wherein said root storage further comprises at least one of a stream and a storage, neither of which are contained in said model directory.

39. (Currently Amended) A computer program product comprising a computer readable medium having computer program logic, the computer program logic comprising:

means for enabling a computer system to store at least one root storage in a storage area;

means for enabling said computer system to store at least one model directory storage in said at least one root storage;

means for enabling said computer system to store at least one model storage in said model directory storage;

means for enabling said computer system to store in said at least one model storage a graphic element list storage having element chunk streams containing variable sized graphic elements and a control element list storage having element chunk streams containing variable sized control elements;

means for enabling said computer system to assign a preselected number of elements to each said element chunk stream;

means for enabling said computer system to allocate each of said preselected number of elements to an element chunk stream in one of said control element list storage and said graphic element list storage.

40. (Original) The computer program product of claim 39, further comprising:

means for enabling said computer system to compress each element chunk; and

means for enabling said computer system to store at least one compressed element chunk in at least one of the graphic element list and control element list.

41. (Original) The computer program product of claim 39, further comprising:

means for enabling said computer system to encrypt each element chunk; and

means for enabling said computer system to store at least one encrypted element chunk in at least one of the graphic element list and control element list.

42. (Previously Presented) The computer program product of claim 39, further comprising:

means for enabling said computer system to compress and encrypt each element chunk; and

means for enabling said computer system to store at least one encrypted and compressed element chunk in at least one of the graphic element list and the control element list.

43. (Original) The computer program product of claim 39, wherein said preselected number is a maximum number.

44. (Original) The computer program product of claim 39, further comprising:

means for enabling said computer system to create an additional element chunk when the number of elements exceeds said preselected number of elements assigned to each element chunk;

means for enabling said computer system to assign a preselected number of elements to said additional element chunk; and

means for enabling said computer system to store new elements in said additional element chunk.

45. (Original) The computer program product of claim 44, further comprising:
means for enabling said computer system to compress each additional element chunk; and

means for enabling said computer system to store at least one additional compressed element chunk in at least one of said graphic element list and said control element list.

46. (Original) The computer program product of claim 44, further comprising:
means for enabling said computer system to encrypt each additional element chunk;
and

means for enabling said computer system to store at least one additional encrypted element chunk in at least one of said graphic element list and said control element list.

47. (Original) The computer program product of claim 44, further comprising:
means for enabling said computer system to compress and encrypt each additional element chunk; and

means for enabling said computer system to store at least one additional encrypted and compressed element chunk in at least one of said graphic element list and said control element list.

48. (Original) The computer program product of claim 44, wherein said preselected number is a maximum number.

49. (Original) The computer program product of claim 39, further comprising means for enabling said computer system to associate a header with said at least one root storage.

50. (Original) The computer program product of claim 39, wherein said computer system is the Internet.

51. (Original) The computer program product of claim 39, wherein said computer system is an Intranet.

52. (Original) The computer program product of claim 39, wherein said computer system is a local area network.

53. (Original) The computer program product of claim 39, wherein said storage area is a file.

54. (Original) The computer program product of claim 39, wherein said storage area is adapted to be operable with a computer aided design program.

55. (Original) The computer program product of claim 39, further comprising means for enabling said computer system to store in said root storage at least one of a first stream containing a header, a second stream containing session information, a third stream containing a manifest and a fourth stream containing file properties.

56. (Original) The computer program product of claim 39, further comprising means for enabling said computer system to store at least one of a stream and a storage, neither of which are contained in said model directory, in said root storage.

57. (Original) The computer program product of claim 39, further comprising:

means for enabling said computer system to store a control model in each root storage;

means for enabling said computer system to store a graphic element list and a control element list in each control model;

means for enabling said computer system to allocate elements to element chunks in said control element list and said graphic element list; and

means for enabling said computer system to compress each element chunk to be stored in said graphic element list or said control model list in said control model directory.

58. (Currently Amended) A computer readable medium containing a file for storing an element list storage including at least one element chunk stream, wherein said at least one element chunk stream comprises an element chunk header for storing information about the at least one element chunk and at least one variable sized element associated with said element chunk header.

59. (Original) The computer readable medium of claim 58, wherein said element list is a graphic element list.

60. (Original) The computer readable medium of claim 58, wherein said element list is a control element list.

61. (Original) The computer readable medium of claim 58, wherein said element list is a global graphic element list.

62. (Original) The computer readable medium of claim 58, wherein said element list is a global control element list.

63. (Original) The computer readable medium of claim 58, wherein said at least one element chunk is compressed.

64. (Original) The computer readable medium of claim 58, wherein said at least one element chunk is encrypted.

65. (Original) The computer readable medium of claim 58, wherein said at least one element chunk is encrypted and compressed.

66. (Currently Amended) A computer program product comprising a computer readable medium having a computer program logic stored therein, the computer program logic comprising:

means for enabling a computing unit to store an element list storage in a storage area;
and

means for enabling a computing unit to store at least one element chunk stream comprising an element chunk header and at least one variable sized element associated with the element chunk header in the element list storage.

67. (Original) The computer program product of claim 66, wherein said element list is a graphic element list.

68. (Original) The computer program product of claim 66, wherein said element list is a control element list.

69. (Original) The computer program product of claim 66, wherein said element list is a global graphic element list.

70. (Original) The computer program product of claim 66, wherein said element list is a global control element list.

71. (Original) The computer program product of claim 66, wherein said at least one element chunk is compressed.

72. (Original) The computer product of claim 66, wherein said at least one element chunk is encrypted.

73. (Original) The computer program product of claim 66, wherein said at least one element chunk is encrypted and compressed.

74. (Currently Amended) A computer program product comprising a computer readable medium having a computer program logic stored therein, the computer program logic comprising:

means for enabling a computing unit to store an element list storage in the computer readable medium; and

means for enabling said computing unit to store at least one element chunk stream comprising an element chunk header and at least one element associated with said element chunk header in the element list storage.

75. (Original) The computer program product of claim 74, wherein said element list is a graphic element list.

76. (Original) The computer program product of claim 74, wherein said element list is a control element list.

77. (Original) The computer program product of claim 74, wherein said element list is a global graphic element list.

78. (Original) The computer program product of claim 74, wherein said element list is a global control element list.

79. (Original) The computer program product of claim 74, wherein said at least one element chunk is compressed.

80. (Original) The computer product of claim 74, wherein said at least one element chunk is encrypted.

81. (Original) The computer program product of claim 74, wherein said at least one element chunk is encrypted and compressed.

82. (Previously Presented) The computer readable medium of claim 3, wherein the element chunks have unique names within the element lists.